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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,424	09/21/2001	Lee Kok Tong	CS00-198	3261
28112	7590	10/07/2003	EXAMINER	
GEORGE O. SAILE & ASSOCIATES			WRIGHT, WILLIAM G	
28 DAVIS AVENUE			ART UNIT	
POUGHKEEPSIE, NY 12603			PAPER NUMBER	
			1754	

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/957,424

Applicant(s)

TONG ET AL.

Examiner

William G. Wright SR.

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 16 and 17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Applicant's election with traverse of claims 16 and 17 in Paper No. 4 is acknowledged.

The traversal is on the ground(s) that applicants argue that the process claims directed to a method of forming a silane abatement process and the apparatus claims are directed to a silane abatement system should be kept together. The applicants further argue that the process must use the apparatus and vice versa. The field of search is argued to cover both process Class/subclass 423/248 and apparatus Class/subclass 422/168 in addition to other unnamed classes and subclasses to provide a complete and adequate search. Applicants also state the fields of search of Groups I and II are clearly and necessarily co-extensive, and that the Examiner's suggestion that the system be used to treat hydrochloric gas is speculative and is not related to the instant claims. This is not found persuasive because the separation of process of using an apparatus and the apparatus is found in the applied standard paragraphs. The process can use any apparatus that will permit the function of the process. The apparatus may be used with any chemical that a practitioner wishes to use in the apparatus to include hydrochloric gas. The fields of search show that the inventions are separate and distinct, as defined by the classification system of the Patent Office. The subject matter is not co-extensive but separate as a defined process and an apparatus

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for a process to be performed in. The system can easily be used to treat hydrochloric gas. The search required for Group I is not required for Group II.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

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U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 16 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over De Santis '349.

De Santis teaches a silane gas treatment process using wet scrubbing with water. This teaching is found at column 2 line 29 et seq. The specific teaching of nitrogen being in the carrier gas is found at column 5 line 11 et seq. where the reactive gas stream is taught to be made up of nitrogen, oxygen and silane. The teaching of the formation of silicon dioxide in the form of fine particles made in the presence of water is found in column 6 line 35 et seq.

The reference does not teach the treatment of waste silane with oxygen dissolved in water.

The reference forms a silica precipitate in the presence of oxygen and water. Therefore it would appear that oxygen is dissolved in the water.

The instant claimed invention is obvious from the teachings of the applied reference. The teachings of air (oxygen) in contact with water are easily noted from Figure 1. Of that Figure the No. 11 teaches contact between liquid and gas, No. 3 supplies water, No. 13 air, spent scrubbing liquid is noted at No. 7 where water, oxygen, silicon dioxide and silane are all in

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contact. This area No. 7 is where the last remnants of the silane gas are reacted to ensure total reaction to the product silicon dioxide. Column 5 lines 44 et seq. is where this teaching is found. It is considered an obvious expedient available to a practitioner to use the process of Figure 1 to make the contact of oxygen, water and silane found in the instant claims. These teachings show the instant claimed invention to be obvious.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William G. Wright, Sr. whose telephone number is (703) 305-7792. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5:00 P.M.

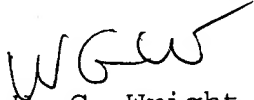
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for the regular communications and (703) 872-9311 for after final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1495.



W. G. Wright, Sr.:cdc

September 17, 2003



STEVEN BOS
PRIMARY EXAMINER
GROUP 1100